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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/541,111	06/30/2005	Stefan Bruening	37664.00020/C2347PCT/US	6131
23657 7590 04/28/2011 DIEHL, SERVILLA LLC (COG/CGG) 33 WOOD AVE SOUTH SECOND FLOOR, SUITE 210 ISELIN, NJ 08830				
EXAMINER COHEN, STEFANIE J				
ART UNIT		PAPER NUMBER		
1732				
NOTIFICATION DATE		DELIVERY MODE		
04/28/2011		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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**Office Action Summary****Application No.**

10/541,111

**Applicant(s)**

BRUENING ET AL.

**Examiner**

STEFANIE COHEN

**Art Unit**

1732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 4/14/2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 24, 26, 28, 38, 40-49, 51 and 52 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 24, 26, 28, 38, 40-49, 51-52 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-940)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/14/2011 has been entered.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 24, 26, 28-38, 40-43 and 51-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ansmann et al (WO0010510) (see corresponding US Patent 6562876) in view of Yamasaki et al (20030161801) and further in view of Miller et al (20020072544).

Ansmann, col. 7, teaches the a cosmetic wax dispersions to be used in accordance with the invention preferably containing

(a) 1 to 50 and more particularly 10 to 30% by weight of waxes and  
(b) 1 to 90 and more particularly 5 to 50% by weight of emulsifiers,  
with the proviso that the quantities add up to 100% by weight with water and  
optionally polyols.

Further, Ansmann, col. 4 lines 17-39, teaches component (a) may also be  
selected from fatty carbonates corresponding to formula (VIII):

$R_{14}O-CO-OR_{15}$  in which  $R_{14}$  and  $R_{15}$  independently of one another are alkyl  
and/or alkenyl groups containing 1 to 22 carbon atoms, with the proviso that they  
contain a total of at least 24 and preferably 32 to 48 carbon atoms.

The substances are obtained by transesterifying dimethyl or diethyl carbonate,  
for example, with the corresponding fatty alcohols by methods known per se.  
Accordingly, the fatty carbonates may be symmetrical or non-symmetrical. However,  
carbonates in which  $R_{sup.14}$  and  $R_{sup.15}$  are the same and represent alkyl groups  
containing 16 to 22 carbon atoms are preferably used. Transesterification products of  
dimethyl or diethyl carbonate with cetyl alcohol, cetearyl alcohol, stearyl alcohol,  
isostearyl alcohol, oleyl alcohol, behenyl alcohol and/or erucyl alcohol in the form of  
their monoesters and diesters and technical mixtures thereof are particularly preferred.

Although Ansmann teaches a wax dispersion, Ansmann does not teach a melting  
point of the wax phase or a particle size of the wax dispersion.

Yamasaki teaches a solid water in oil emulsion cosmetic composition.

Yamasaki, paragraphs 13-14 of the PG PUB, teaches the stick-type solid water-  
in-oil type emulsion cosmetic composition of the present invention has the property of

easily melting on the skin due to the fact that the wax used has a suitably low melting point and spreading over the skin smoothly, since the yield value thereof at the time of application is small.

The stick-type solid water-in-oil type emulsion cosmetic composition of the present invention is intended to mean one which is filled into a stick container and usually solidifies, including paste form, without fluidity at the temperature range of, for example, 0°C to 50°C, in which the cosmetic composition is used.

As known in the art the solidification range is the same as the melting range.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to ensure the emulsion as taught by Ansmann has a melting point as taught by Yamasaki so the Ansmann emulsion easily melts on the skin and spreads over the skin smoothly.

Although Ansmann and Yamasaki teach a wax emulsion, neither of these references teach a particle size of the wax dispersion.

Miller, paragraph 2 of the PGPUB, teaches fine emulsions or microemulsions are low-viscosity, optically transparent dispersions of two immiscible liquids which are stabilized by at least one ionic or nonionic surfactant. In the case of fine emulsions, the particle diameters are in the range from about 0.1 to 10 micrometers. The interfacial tension between the two phases is extremely low. The viscosity of many fine emulsions of the O/W type is comparable with that of water. Macroemulsions are milky white in color and, upon heating, tend toward phase separation or toward sedimentation of the dispersed substances.

It would have been obvious to one of ordinary skill in the art at the time of the invention to ensure the dispersion as taught by Ansmann and Yamasaki comprises particles sizes in the range as taught by Miller so upon heating there will be no phase separation or sedimentation of the dispersed substances.

Regarding claim 26, Ansmann, col. 5, teaches suitable emulsifiers are, for example, nonionic surfactants.

Regarding claim 28, Miller, paragraph 2 of the PGPUB, teaches fine emulsions or microemulsions are low-viscosity, optically transparent dispersions of two immiscible liquids which are stabilized by at least one ionic or nonionic surfactant. In the case of fine emulsions, the particle diameters are in the range from about 0.1 to 10 micrometers.

Regarding claim 29, Ansmann, col. 7, teaches the a cosmetic wax dispersions to be used in accordance with the invention preferably contain

(a) 1 to 50 and more particularly 10 to 30% by weight of waxes and

(b) 1 to 90 and more particularly 5 to 50% by weight of emulsifiers.

Regarding claims 30-31, Ansmann, cols. 1 and 2, teaches suitable waxes are, for example, alkylene glycol esters; fatty acid alkanolamides; partial glycerides; esters of polybasic, optionally hydroxysubstituted carboxylic acids with fatty alcohols containing 6

to 22 carbon atoms; fatty compounds such as, for example, fatty alcohols, fatty ketones, fatty aldehydes, fatty ethers and fatty carbonates.

Typical examples of alkylene glycol esters are monoesters and/or diesters of ethylene glycol, propylene glycol, diethylene glycol, dipropylene glycol, triethylene glycol or tetraethylene glycol with fatty acids containing 6 to 22 and preferably 12 to 18 carbon atoms.

Regarding claims 32-33, Ansmann, col. 8, teaches suitable thickeners are, for example, polysaccharides, more especially xanthan gum, guar-guar, agar-agar, alginates and tyloses, carboxymethyl cellulose and hydroxyethyl cellulose.

Regarding claim 36, Ansmann, col. 7, teaches the a cosmetic wax dispersions to be used in accordance with the invention preferably contain

- (a) 1 to 50 and more particularly 10 to 30% by weight of waxes and
  - (b) 1 to 90 and more particularly 5 to 50% by weight of emulsifiers,
- with the proviso that the quantities add up to 100% by weight with water and optionally polyols.

Further, Ansmann, abstract teaches, a process for cold-producing an oil-in-water emulsion having enhanced consistency and tactile properties involving: (a) providing an oil component; (b) providing an aqueous wax dispersion containing: (i) a wax component; and (ii) an emulsifier; (c) providing water; and (d) cold-stirring (a)-(c) to form the emulsion .

Further, Ansmann, col. 5, teaches suitable emulsifiers are, for example, nonionic surfactants.

Further, Ansmann, cols. 1 and 2, teaches suitable waxes are, for example, alkylene glycol esters; fatty acid alkanolamides; partial glycerides; esters of polybasic, optionally hydroxysubstituted carboxylic acids with fatty alcohols containing 6 to 22 carbon atoms; fatty compounds such as, for example, fatty alcohols, fatty ketones, fatty aldehydes, fatty ethers and fatty carbonates.

Typical examples of alkylene glycol esters are monoesters and/or diesters of ethylene glycol, propylene glycol, diethylene glycol, dipropylene glycol, triethylene glycol or tetraethylene glycol with fatty acids containing 6 to 22 and preferably 12 to 18 carbon atoms.

Regarding claims 34-35, Ansmann, cols. 11 and 12, teaches hydrotropes, for example ethanol, isopropyl alcohol or polyols, may be used to improve flow behavior. Suitable polyols preferably contain 2 to 15 carbon atoms and at least two hydroxyl groups. Typical examples are glycerol; alkylene glycols such as, for example, ethylene glycol, diethylene glycol, propylene glycol, butylene glycol, hexylene glycol and polyethylene glycols with an average molecular weight of 100 to 1000 dalton.

Glycerol and propylene glycol are examples of humectants.



Regarding claims 37-38, Ansmann, col. 8, teaches suitable thickeners are, for example, polysaccharides, more especially xanthan gum, guar-guar, agar-agar, alginates and tyloses, carboxymethyl cellulose and hydroxyethyl cellulose.

Further, Ansmann, table 2, teaches xanthan gum present in the amount of 2%.

Regarding claim 40, Miller, paragraph 2 of the PGPUB, teaches fine emulsions or microemulsions are low-viscosity, optically transparent dispersions of two immiscible liquids which are stabilized by at least one ionic or nonionic surfactant. In the case of fine emulsions, the particle diameters are in the range from about 0.1 to 10 micrometers.

Regarding claim 41, Ansmann, col. 7, teaches the a cosmetic wax dispersions to be used in accordance with the invention preferably contain

- (a) 1 to 50 and more particularly 10 to 30% by weight of waxes and
- (b) 1 to 90 and more particularly 5 to 50% by weight of emulsifiers.

Regarding claims 42-43, Ansmann, cols. 11 and 12, teaches hydrotropes, for example ethanol, isopropyl alcohol or polyols, may be used to improve flow behavior. Suitable polyols preferably contain 2 to 15 carbon atoms and at least two hydroxyl groups. Typical examples are glycerol; alkylene glycols such as, for example, ethylene

glycol, diethylene glycol, propylene glycol, butylene glycol, hexylene glycol and polyethylene glycols with an average molecular weight of 100 to 1000 dalton.

Glycerol and propylene glycol are examples of humectants.

Claim 44-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ansmann et al (WO0010510) (see corresponding US Patent 6562876) in view of Yamasaki et al (20030161801) and further in view of Miller et al (20020072544) as applied to claim 24 and further in view of Bucheler et al (4996004).

Although Ansmann, Yamasaki and Miller teach a wax dispersion, these references do not teach a production method.

Bucheler teaches a preparation method for stable cosmetic dispersions of organic substances in water with fine particle size control. This preparation method consists of (1) creating a preliminary emulsion of melted wax and water and (2) spraying this preliminary emulsion into a cooling tank filled with water below the melting point of the solid (col. 5, lines 42-58).

Bucheler also teaches that this method confers several efficiency advantages over convention homogenizers. It would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Bucheler to produce the composition of Ansmann in order to maximize process efficiency while producing a stable cosmetic preparation.

Regarding claim 45, Bucheler teaches a homogenization step for the pre-emulsion prior to introduction to the cooling tank (col. 3, lines 56-68).

Regarding claim 46, Bucheler teaches a cooling step for the pre-emulsion before adding it to the cooling tank (col. 6, lines 7-11 ).

Regarding claim 47-48, Bucheler teaches the addition of the desired emulsifier to the pre-emulsion before addition to the cooling tank (col. 5, lines 42-58). Ansmann teaches the use of a polysaccharide as the emulsifier (col. 8, lines 25-34).

Regarding claim 49, Bucheler teaches the use of a pressure nozzle for homogenization.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to STEFANIE COHEN whose telephone number is (571)270-5836. The examiner can normally be reached on Monday through Thursday 9:3am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Melvin Curtis Mayes can be reached on 5712721234. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Stefanie Cohen

4/21/2011

SC

April 23, 2011

/Melvin Curtis Mayes/  
Supervisory Patent Examiner, Art Unit 1732